

⑩ 日本国特許庁(JP)

⑪ 実用新案出願公開

## ⑫ 公開実用新案公報(U) 平2-106005

⑬ Int. Cl.<sup>5</sup>

識別記号

庁内整理番号

⑭ 公開 平成2年(1990)8月23日

E 01 C 13/00

B

7012-2D

審査請求 未請求 請求項の数 1 (全1頁)

⑮ 考案の名称 砂入り人工芝生が施設された運動場

⑯ 実 願 平1-13473

⑰ 出 願 平1(1989)2月6日

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## ⑳ 実用新案登録請求の範囲

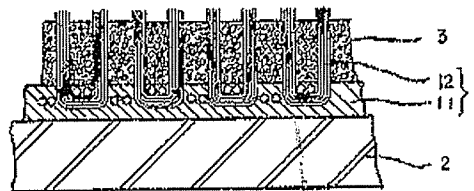
表面がバインダー樹脂を介してフタロシアニンで処理された砂が人工芝生のパイル糸間に充填されてなる、砂入り人工芝生が敷設された運動場。

は本考案に用いる処理砂を示す断面図である。である。1……人工芝、3……処理砂、11……基布、12……パイル糸、32……バインダー、33……フタロシアニン。

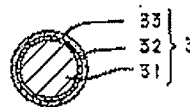
## 図面の簡単な説明

第1図は本考案の実施例を示す断面図、第2図

第1図



第2図



it fills up with the sand by which the surface was processed by phthalocyanine via binder resin between pile yarn of an artificial lawn.

The purpose of above-mentioned this design is attained by this.

In this design, phenol resin, an acrylic resin, etc. are used as a binder, for example.

In this design, Phthalocyanine Green, phthalocyanine yellow, copper phthalocyanine blue, phthalocyanine Brown, etc. are used as phthalocyanine, for example.

The sand in this design by which the surface was processed by phthalocyanine via binder resin can be obtained by mixing sand, binder resin, and phthalocyanine with a mixer, and, for example, heat-treating this all over a heating furnace.

Hereafter, a drawing explains this design.

The sectional view in which Drawing 1 shows an example of this design, and Drawing 2 are sectional views showing an example of the processing sand used for this design.

1 is an artificial lawn and the leaflet which consists of the pile yarn 12 which becomes the base fabric 11 from materials, such as polypropylene, is provided. This artificial lawn 1 is constructed on the ground of the playground 2, and the playground where it was on the base fabric 11, and left that leaf tip part, spraying restoration of the processing sand 3 by which the surface of the sand granules 31 was processed by the phthalocyanine 33 via the binder resin 32 was carried out, and the artificial lawn was installed between the pile yarn 12 is constructed.

#### (OPERATION)

In this design, since it fills up with the sand by which the surface was processed by phthalocyanine via binder resin between pile yarn of an artificial lawn, the original adaptability can be held for a long time, without a surface solidifying. The use is applicable also to football places including a tennis court, a soccer stadium, and other multiple-purpose playgrounds.

#### (EXAMPLE)

Hereafter, an example explains this design.

The sand which added phenol resin 3 weight section as a binder and phthalocyanine 1.5 weight section to Example No. 4 silica sand 95.5 weight section, was heat-treated all over the heating furnace, and was processed by phthalocyanine via binder resin on the surface was manufactured.

The playground which carried out spraying restoration of this processing sand between the piles of the artificial lawn of 19 mm of pile length, and constructed the artificial lawn containing sand was constructed. When the hard tennis ball was dropped from 200 cm in height on this playground, it was only by bouncing 100 cm. When the golf ball was dropped from 200 mm in height, it only bounced 10 cm. When solidification hardly advanced but the surface of the playground did said same examination on this playground even after passing in two years, that